IN THE CLAIMS:

Please amend Claims 1 and 4 as follows:

1. (Currently Amended) A method for manufacturing carbon/silicon-carbide composite comprising the steps of:

1) hardening a stacked carbon/phenolic preform;

2) subjecting said preform to carbonizing and heat processing conditions[,] up to 2300°C~~, sufficient~~ sufficiently to carbonize said preform;

3) sintering said hardened and carbonized preform by infiltrating it with liquid metal silicon between the temperatures of 1400°C and 1800°C; and

4) forming an anti-oxidation layer on the surface of said hardened and carbonized preform by introducing gaseous SiO_2 to react with any remaining unreacted carbon and silicon, while heat-processing said hardened and carbonized preform within the temperature range of 2000°C – 2700°C.

2. (Previously Amended) The method according to claim 1, wherein the carbon/phenolic preform is prepared by a method selected from the group consisting of:

press molding, tape wrapping with internal and external compression, sewing 2-dimensional fabrics with thermal resistant fiber to make a 3-dimensional preform, and the involute method.

3. (Original) The method according to Claim 2, wherein the fiber used for sewing is one of carbon fiber, quartz fiber, silica fiber, or tungsten line.

4. (Currently Amended) A method for manufacturing carbon/silicon-carbide composite comprising the steps of:

1) hardening a stacked carbon/phenolic preform;

2) carbonzing~~,~~ and heat processing ~~and ultra heat processing~~ said ~~hardening~~ hardened preform at the same time; and

3) sintering said hardened and carbonized perform by infiltrating it with liquid metal silicon between the temperature of 1400°C-1800°C.

5. (Previously Amended) The method according to either claim 1 or claim 4, wherein a discharge passage of dissolute gas is made by making holes on the hardened preform in step 2).

6. (Previously Amended) The method according to claim 5, wherein the discharge passage is made by making holes of 0.5mm~1.5mm diameter with 5mm~20mm interval if the hardened preform is rectangular box shape.

7. (Original) The method according to Claim 5, wherein the discharge passage is made by making holes of 0.5mm~1.5mm diameter with 5mm~20mm interval if the hardened test piece is hollow cylinder shape.

8. (Previously Amended) The method according to either claim 1 or claim 4, wherein graphite and coke powder are put into a graphite box with a hole and wrap up the entire surface of the hardened preform as thick as 1.5 times of maximum thickness of the hardened preform when carbonization and heat processing are performed in the step 2).

9. (Original) The method according to either Claim 1 or Claim 4, wherein high purity metal silicon of 98%~99.9% silicon purity is used as 110%~130% weight comparing o that of carbonized product.

10. (Previously Amended) The method according to either claim 1 or claim 4 further comprising a step of coating boron nitride compound composed of 70~80% BN, 10~20% acetone, and 0~10% water on the surface of hardened preform after the step 3) is finished.

11. (Previously Added) The method according to Claim 1 which includes the step of forming an anti-oxidation layer on the surface of said hardened and carbonized preform by introducing gaseous SiO_2 to react with any remaining unreacted carbon and silicon, while heat-processing said hardened and carbonized preform within temperature range of 2000°C – 2700°C.

12. (Previously Added) A method for manufacturing carbon/silicon-carbide composite comprising the steps of:

1) forming a carbon/phenolic preform by stacking carbon/phenolic fibers/fabric

2) hardening the carbon/phenolic preform;

3) subjecting said preform to carbonizing and heat processing conditions up to 2300°C, sufficient to carbonize said preform;

4) sintering said hardened and carbonized preform by infiltrating it with liquid metal silicon between the temperature of 1400°C and 1800°C; and

5) forming an anti-oxidation layer on the surface of said hardened and carbonized preform by introducing gaseous SiO_2 to react with any remaining unreacted carbon and silicon, while heat-processing said hardened and carbonized preform within the temperature range of 2000°C~2700°C.

13. (Previously Added) The method according to claim 12, wherein the carbon/phenolic preform is formed by a method selected from the group of consisting of:

press molding, tape wrapping with internal and external compression, sewing 2-dimensional fabrics with thermal resistant fiber to make 3-dimensional preform, and involute method.

14. (Previously Added) The method according to claim 12, wherein the carbonization and the heat processing are performed at the same time in the step 3).

15. (Previously Added) The method according to either claim 12, wherein a discharge passage of dissolute gas is made by making holes on the hardened preform in the step 3).

16. (Previously Added) The method according to claim 15, wherein the discharge passage is made by making holes of 0.5mm~1.5mm diameter with 5mm~20mm interval if the hardened preform is rectangular box shape.

17. (Previously Added) The method according to claim 15, wherein the discharge passage is made by making holes of 0.5mm~1.5mm diameter with 5mm~20mm interval if the hardened test piece is hollow cylinder shape.

18. (Previously Added) The method according to either claim 12, wherein graphite and coke powder are put into a graphite box with a hole and wrap up the entire surface of the hardened preform as thick as 1.5 times of maximum thickness of the hardened preform when carbonization and heat processing are performed in the step 3).

19. (Previously Added) The method according to claim 12, wherein high purity metal silicon of 98%~99.9% silicon purity is used as 110%~130% weight comparing to that of carbonized product.

20. (Previously Added) The method according to claim 12, further comprising a step of coating boron nitride compound composed of 70~80% BN, 10~20% acetone, and 0~10% water on the surface of hardened preform after the step 4) is finished.

REMARKS

The previous application is a request for continued application.

The United States Patent and Trademark Office issued a Final Rejection dated January 9, 2003. Applicants responded thereto in a Response dated June 9, 2003 and filed a Notice of Appeal. In an advisory Action dated July 8, 2003, the United States Patent and Trademark Office indicated that the Response would not be entered. Applicants are submitting this request for continued examination, requesting that the Response dated June 9, 2003 be entered.

In addition, applicants are submitting the Preliminary Amendment for the amending claims.

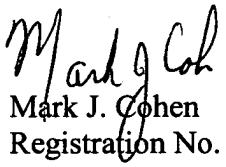
The Preliminary Amendment incorporates by reference the Response under 37 C.F.R. §1.116, dated June 9, 2003. Moreover, this Preliminary Amendment is meant to supplement the same, and not replace it.

In the Preliminary Amendment, Claims 1 and 4 are further amended. Claim 1 is amended by rewriting step 2 in better English. In addition, the Claim 4 as amended rewrites original Claim 4 in independent form; however, as originally drafted, Clam 4 contained redundant subject matter, viz., it refers to heat processing and ultra-heating processing. Since ultra heat processing is a type of heat processing, the former term has been deleted from the claimed subject matter. Thus, as amended, the redundancy has been removed.

No new matter has been added to the application.

Wherefore, the present application is in condition for allowance with action is earnestly solicited.

Respectfully submitted,



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